

WHAT IS CLAIMED IS:

1. A method for managing traffic in a network, involving a communication
5 device with a limited power supply, characterized by:
 - determining a current level of available power in said power supply for transmitting and receiving functions of said communication device;
 - communicating said power level to a controller;
 - determining a current power drain rate of said power source;
 - 10 detecting a need for data transfer associated with said communication device, wherein said data transfer is one of an incoming call to said communication device and a request for transmission from said communication device;
 - determining a quantity of data relating to said data transfer;
 - 15 calculating whether said power level is sufficient to effect the transfer of said data; and
 - signaling said controller to effect said data transfer according to said power level calculations.
- 20 2. The method of Claim 1, further characterized by:
 - storing initial parameters for said power supply of said communication device and periodically updating said power supply parameters, wherein said parameters include:
 - a drain rate for each communication service available to said
 - 25 communication device; and
 - an initial power source level upon connection to the network.
3. The method of Claim 1, wherein said step of signaling said controller comprises instructions based on said power supply connections for one of
30 receiving all of said data, redirecting all of said data to a predetermined location,

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and receiving a portion of said data and directing the remainder of said data to a predetermined address.

4. The method of Claim 1, wherein said communication device is a battery
5 operated remote sensor and said network is a wireless network.

5. The method of Claim 4, wherein said network is a non-wireless network.

6. The method of Claim 1, wherein said communication device is a wireless
10 mobile terminal and said network is a wireless network.

7. The method of Claim 6, wherein said traffic is voice traffic and a voice call
is begun on said mobile terminal at a first quality of service level according to an
initially determined power level and power drain rate of said mobile terminal
15 battery, and said voice call is continued at a second quality of service level
according to a subsequently determined power level and power drain rate of said
mobile terminal battery.

8. The method of Claim 6, wherein a video message is presented for transfer
20 and the audio portion of the message is transferred but the video portion is
redirected to a predetermined address and a message is sent to inform the
recipient of said audio the location of said video portion.

9. The method of Claim 3, wherein said data comprises a Multimedia
25 Messaging Service (MMS) message.

10. The method of Claim 3, wherein said data comprises a video message.

11. The method of Claim 1, wherein said communication device is a wireless
30 modem.

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12. The method of Claim 1, wherein said communication device is a cordless phone system and said network is a public switched telephone network (PSTN).

5 13. The method of Claim 1, wherein said communication device is a personal digital assistant and connects to a PSTN by wirelessly connecting to a computer connected to said PSTN

14. An apparatus for managing traffic in a network involving a communication
10 device with a limited power supply, characterized by:

a transceiver for receiving and transmitting messages;

a controller for monitoring a current power level of said power supply and a
calculated power drain rate of said communication device;

15 means coupled to said power supply for determining said power drain rate
of said communication device; and

signal means for signaling said communication device to one of receive
and transmit messages according to said current power level and said drain rate.

15. The apparatus of Claim 14, further characterized by:

20 a database for storing initial parameters for said power supply of said
communication device and periodically updating said power supply parameters,
wherein said parameters include:

a drain rate for each communication service available to said
communication device; and

25 an initial power source level upon connection to the network.

16. The apparatus of Claim 14, further characterized by

means for signaling said controller to one of: receiving all of said data,
redirecting all of said data to a predetermined location, and receiving a portion of

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said data and directing the remainder of said data to a predetermined address based on said power supply measurements.

17. The apparatus of Claim 14, wherein said communication device is a battery operated remote sensor and said network is a wireless network.

18. The apparatus of Claim 17, wherein said network is a non-wireless network.

19. The apparatus of Claim 14, wherein said communication device is a wireless mobile terminal and said network is a wireless network.

20. The apparatus of Claim 19, wherein said traffic is voice traffic and a voice call is begun by said wireless mobile terminal at a first quality of service level according to an initially determined power level and power drain rate of a battery for said wireless terminal and said voice call is continued at a second quality of service level according to a subsequently determined power level and power drain rate of said battery.

21. The apparatus of Claim 14, wherein a video message is presented for transfer and the audio portion of the message is transferred but the video portion is redirected to a predetermined address and a message is sent to inform the recipient of said audio the location of said video portion.

22. The apparatus of Claim 14 wherein said communication device is a wireless modem.

23. The apparatus of Claim 14, wherein said communication device is a cordless phone system and said network is a public switched telephone network (PSTN).

24. The apparatus of Claim 14, wherein said communication device is a personal digital assistant and connects to a PSTN by wirelessly connecting to a computer connected to said PSTN

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25. The apparatus of Claim 14, wherein said means for determining said power drain rate further comprises periodically determining said power drain rate associated with said communication device when said communication device changes location during data transmission.

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26. The method of Claim 1, wherein the step of determining a current power drain rate of said power source further comprises the step of periodically determining said drain rate when said communication device changes location during data transmission.